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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 10/049,646 02/25/2002 Thomas Jaworek 219029US0PCT 7478 22850 08/13/2003 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. EXAMINER 1940 DUKE STREET MCCLENDON, SANZA L ALEXANDRIA, VA 22314 ART UNIT PAPER NUMBER 1711

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/049,646	JAWOREK ET AL.
Office Action Summary	Examiner	Art Unit
	Sanza L McClendon	1711
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status		
1)⊠ Responsive to communication(s) filed on <u>25 February 2002</u>		
2a) ☐ This action is FINAL . 2b) ☑ Thi	s action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims		
4)⊠ Claim(s) <u>1-9</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-9</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.		
If approved, corrected drawings are required in reply to this Office action.		
12) The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a)⊠ All b)□ Some * c)□ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3.⊠ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.		
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).		
a) The translation of the foreign language provisional application has been received.		
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)
U.S. Patent and Trademark Office		

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

- 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 - A person shall be entitled to a patent unless -
 - (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Masakazu et al (JP 63214375).

Masakazu et al teaches methods of making anticorrosive ultraviolet cured resin coatings for metallic bases. Said method comprises irradiating resin compositions using ultraviolet radiation in an inert gas atmosphere containing less than 0.5 vol% 0_2 . This anticipates claim 1, wherein 0.5 vol% 0_2 is approximately 5000 ppm 0_2 . Said resin compositions comprise (meth) acrylate resins, such as polyurethane (meth) acrylate s, polyester (meth) acrylates, and epoxy (meth) acrylate. These anticipate claims 4-5. In addition, Masakazu et al teaches using monomers and photoinitiators in said resin compositions, such as trimethylolpropane acrylate and styrene methacrylate and benzion and other initiators. These appear to anticipate claims 6-7.

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4. Claims 1 and 3-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hahn et al (4,170,663).

The examiner is interpreting claim 1 in it is broadest form, that is a method comprising the steps outlined in claim 1 which is open to other method steps because of the comprising language.

Hahn et al teaches methods for producing coatings of low gloss. teaches said low gloss coatings are hard, mar resistant, and abrasion resistant coatings that are prepared by exposing a coating composition containing an oxygen inhibitable, radiation-curable, organic material and an ultraviolet light absorbing pigment to radiation in three stages. The second stage involves exposing the partially cured coating from stage 1 to ultraviolet radiation in an atmosphere free of a cure-inhibiting amount of oxygen, wherein Hahn et al teaches that curing atmosphere typically contains a concentration in oxygen in the range from 300 to 5000 ppm by volume not to be cure-inhibiting. Said coating composition comprises ethylenically unsaturated organic compounds, such as polyester acrylates (column 4), polyacrylates (column 6), polyimide acrylates (column 8) epoxy acrylates (column 8), urea acrylates (column 8), and polyurethane acrylates (column 8). These anticipates claim 4-5. Wherein said polymers should have a number average molecular weight in the range from 1500 to 50,000 (column 7). This anticipates claim 3. In addition said coating composition can contain vinyl monomers for crosslinking, such as acrylate and methacrylate monomers (column 9), wherein Hahn et al teaches that said vinyl monomer are preferably liquid compounds miscible with the first component. This anticipates The examiner contends that the second method stage taught by Hahn et al anticipates the method of claims 1 and 9. Hahn et al teaches that various substrates can be coated by said three-stage method-see column 11, lines 46-57, wherein substrates like wood, fiberboard, and particleboard anticipate claim 8.

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5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn et al (4,170,663).

Hahn et al is described in the above rejection. Hahn et al does not expressly teach the double bond content for the polymers/oligomers usable in said method. However, Hahn et al teaches that said organic materials usable in said method contain a plurality of sites of ethylenic unsaturation, which under the influence of radiation become crosslinking sites through addition reactions to form hard thermoset polymers. Therefore, the examiner contends that said polymer/oligomers taught by Hahn et al have to have at minimum a double bond content of at least 0.01 to 1 mol/100 grams in order to be influenced by radiation to produce the crosslinking sites for formation of hard thermoset coating compositions.

Conclusion .

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L McClendon whose telephone number is (703) 305-0505. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned

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are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0657.

Sanza L McClendon

Examiner

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SMc

August 11, 2003

SAMUEL/A. ACQUAH PRIMARY FXANINER

GROUP 1882 / 700